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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 6

Complete if Known	
Application Number	09/307,223
Filing Date	May 7, 1999
First Named Inventor	Judith A. Varner
Group Art Unit	NYA
Examiner Name	NYA
Attorney Docket Number	6627-PA11

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	A1	US5753230		Brooks et al	05-19-98
	A2	US5766591		Brooks et al.	06-16-98
	A3	US5627263		Rouslahti et al.	05-06-97
	A4	US5855866		Thorpe et al	01-05-99

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4] (if known)	Kind Code[5]	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T[6]
	B1		WO95/14714		LA JOLLA CANCER RESEARCH FOUNDATION	06-01-95	
	B2		WO97/10507		LA JOLLA CANCER RESEARCH FOUNDATION	03-20-97	
	B3		WO98/10795		LA JOLLA CANCER RESEARCH FOUNDATION	03-19-98	
	B4		WO99/13329		LA JOLLA CANCER RESEARCH FOUNDATION	03-18-99	
	B5		EP0906919A2		LA JOLLA CANCER RESEARCH FOUNDATION	04-07-99	

Examiner Signature [signature] Date Considered 8/21/06

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[1]Unique citation designation number. [2]See attached Kinds of U.S. Patent Documents. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent documents.
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 6

Complete if Known	
Application Number	09/307,223
Filing Date	May 7, 1999
First Named Inventor	Judith A. Varner
Group Art Unit	NYA
Examiner Name	NYA
Attorney Docket Number	6627-PA11

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C1	AOTA, S., NOMIZU, M., and Yamada, K.M. 1994. The short amino acid sequence Pro-His-Ser-Arg-Asn in human fibronectin enhances cell-adhesive function. J. Biol. Chem. 269: 24755-24761.	
	C2	ARAP W et al. 1997. Cancer treatment by targeted drug delivery to tumor vasculature in a mouse model. Science 279: 377-380.	
	C3	BADER, B.L. et al. 1998. Extensive vasculogenesis, angiogenesis, and organogenesis precede lethality in mice lacking all αv integrins. Cell 95: 507-519.	
	C4	BLOCH, W. et al. 1997. β1 integrin is essential for teratoma growth and angiogenesis. J. Cell Biol. 139: 265-278.	
	C5	BLYSTONE, S.D. et al. 1994. Integrin αvβ3 differentially regulates adhesive and phagocytic functions of the fibronectin receptor α5β1. J. Cell Biol. 127: 1129-1137.	
	C6	BROOKS, P.C. et al. 1994a. Requirement of vascular integrin alpha v beta 3 for angiogenesis. Science 264: 569-571.	
	C7	BROOKS, P.C. et al. 1994b. Integrin alpha v beta 3 antagonists promote tumor regression by inducing apoptosis of angiogenic blood vessels. Cell 79:1157-1164.	
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Examiner		Date Considered	8/21/06

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Sheet 3 of 6

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Application Number	09/307,223
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First Named Inventor	Judith A. Varner
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Examiner Name	NYA
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	C9	CARRON, C.P. et al.1998. A peptidomimetic antagonist of the integrin αvβ3_inhibits Leydig cell tumor growth and development of hypercalcemia of malignancy. Cancer Res. 58: 1930-1955.	
	C10	CASTELLANI, P. et al. 1994. The fibronectin isoform containing the ED-B oncofetal domain: a marker of angiogenesis. Int. J. Cancer 59: 612-618.	
	C11	CHARO, IF et al. 1990. The vitronectin receptor alpha v beta 3 binds fibronectin and acts in concert with alpha 5 beta 1 in promoting cellular attachment and spreading on fibronectin. J. Cell Biol. 111: 2795-800.	
	C12	CHRISTOFIDOU-SOLOMIDOU, M. et al. 1997. Expression and function of endothelial cell αv integrin receptors in wound-induced human angiogenesis in human skin/SCID mice chimeras. Am. J. Path. 151: 975-983.	
	C13	CLARK, R.A.F. et al. 1982. Blood vessel fibronectin increases in conjunction with endothelial cell proliferation and capillary ingrowth during wound healing. J. Invest. Dermatol. 79: 269-276.	
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	C18	FRIEDLANDER, M. et al. 1995. Definition of two angiogenic pathways by distinct alpha v integrins. Science 270:1500-1502.	
Examiner		Date Considered	8/11/06

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known	
Application Number	09/307,223
Filing Date	May 7, 1999
First Named Inventor	Judith A. Varner
Group Art Unit	NYA
Examiner Name	NYA
Attorney Docket Number	6627-PA11

Sheet 4 of 6

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C19	FRIEDLANDER M. et al. 1996. Involvement of integrin αvβ3 and αvβ5 in ocular neovascular diseases. Proc. Natl. Acad. Sci. 93: 9764-9769.	
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	C21	GOH, K. L. et al. 1997. Mesodermal defects and cranial neural crest apoptosis in α5 integrin-null embryos. Development 124: 4309-4319.	
	C22	LAN, N. et al. 1998. Distinct signal transduction pathways are utilized during the tube formation and survival phases of in vitro angiogenesis. J. Cell Sci.111: 3621-3631.	
	C23	KACZMAREK, J. et al. 1994. Distribution of oncofetal fibronectin isoforms in normal hyperplastic and neoplastic human breast tissues. Int. J. Cancer 58: 11-16.	
	C24	KOIVUNEN, E. et al. 1993. Selection of peptides binding to the α5β1 integrin from a phage display library. J. Biol. Chem. 268: 20205-20210.	
	C25	KOIVUNEN, E., Wang, B., Ruoslahti, E. 1994. Isolation of a highly specific ligand for the α5β1 integrin from a phage display library. J. Cell Biol. 124: 373-380.	
	C26	MAGNUSSON, M.K. and Mosher, D.F. 1998. Fibronectin: Structure, assemby, and cardiovascular implications. Arterioscler. Thromb. Vasc. Biol. 18: 1363-1370.	
	C27	NERI, D., Camemolla, B., Nissim, A., Blaza, E., Leprini, A., Querze,' G., Pina, A., Tarli, L., Halin, C., Neri, P., Zardi, L. Winter, G. 1997. Targeting by affinity-matured recombinant antibody fragments of an angiogenesis associated fibronectin isoform, Nature Biotech. 15: 1271-1275.	
	C28	PIERSCHBACHER, M.D., Hayman, EG; and Ruoslahti, E. 1981. Location of the cell-attachment site in fibronectin with monoclonal antibodies and proteolytic fragments of the molecule. Cell 26: 259-67.	

Examiner		Date Considered	8/24/06

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 5 of 6

Complete if Known	
Application Number	09/307,223
Filing Date	May 7, 1999
First Named Inventor	Judith A. Varner
Group Art Unit	NYA
Examiner Name	NYA
Attorney Docket Number	6627-PA11

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

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	C29	PYTELA, R. et al. 1985. Identification and isolation of a 140 kD cell surface glycoprotein with properties expected of a fibronectin receptor. Cell 40: 191-98.	
	C30	RUOSLAHTI, E. et al. 1981. Alignment of biologically active domains in the fibronectin molecule. J. Biol. Chem. 256:7277-81.	
	C31	SECHLER, J. L. and Schwartzbauer, J.E. 1998 Control of cell cycle progression by fibronectin matrix architecture. J. Biol. Chem. 273: 25533-25536.	
	C32	SENGER, D.R. et al. 1996. Stimulation of endothelial cell migration by vascular permeability factor/vascular endothelial growth factor through cooperative mechanisms involving the alphav beta3 integrin, osteopontin, and thrombin. Am. J. Pathol. 149:1-7.	
	C33	SENGER, D. R. et al. 1997. Angiogenesis promoted by vascular endothelial growth factors: Regulation through α1β1_and α2β1 integrins. Proc. Nat'l Acad. Sci. USA 94: 13612-13617.	
	C34	SIMON, K.O. et al. 1997. The αvβ3 integrin regulates α5β1-mediated cell migration toward fibronectin. J. Biol. Chem. 272: 29380-29389.	
	C35	STROMBLAD S., et al. 1996. Suppression of p53 activity and p21WAF1/CIP1 expression by vascular cell integrin alphaVbeta3 during angiogenesis. J Clin Invest 98: 426-433.	
	C36	STROMBLAD, S. and Cheresh, D. A. 1996. Integrins, angiogenesis and vascular cell survival. Chemistry and Biology 3: 881-885.	
	C37	SUEHIRO,K., GAILIT, J. and Plow, E.F. 1997. Fibrinogen is a ligand for integrin α5β1 on endothelial cells. J. Biol. Chem. 272: 5360-5366.	
	C38	VARNER, J.A. 1997. The role of vascular cell integrin αvβ3 and αvβ5 in angiogenesis., Regulation of Angiogenesis (ed. by I.D. Goldberg & E.M. Rosen Birkhauser Verlag, Basel/Switzerland) Exs. 79: 361-390.	
	C39	VARNER, J.A. et al. 1995. Integrin α5β1 expression negatively regulates cell growth: reversal by attachment to fibronectin. Mol. Biol. Cell 6: 725-740.	
Examiner			Date Considered 8/21/06

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known	
Application Number	09/307,223
Filing Date	May 7, 1999
First Named Inventor	Judith A. Varner
Group Art Unit	NYA
Examiner Name	NYA
Attorney Docket Number	6627-PA11

Sheet 6 of 6

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
PJM	C40	YANG, J.T., et al. 1993. Embryonic mesodermal defects in α5 integrin-deficient mice. Development 119: 1093-1105.	

Examiner		Date Considered	8/21/06

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Substitute for form 1449B/PTO **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** *(use as many sheets as necessary)* Sheet 1 of 1	*Complete If Known*	
	Application Number	09/307,223
	Filing Date	May 7, 1999
	First Named Inventor	Varner, Judith A.
	Art Unit	1642
	Examiner Name	S. Ungar
	Attorney Docket Number	021935-000110US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	BC	Guo, Neng-hua, et al., "Thrombospondin 1 and Type I Repeat Peptides of Thrombospondin 1 Specifically Induce Apoptosis of Endothelial Cells", *Cancer Res.*, (1997), 57: 1735-1742	
	BD	Kim, Semi, et al., "Regulation of Angiogenesis *in Vivo* by Ligation of Integrin $\alpha 5\beta 1$ with the Central Cell-Binding Domain of Fibronectin", *American Journal of Pathology*, (2000), 156(4): 1345-1362	
	BE	Ruoslahti, Erkki, "Integrin Signaling and Matrix Assembly", *Tumor Biology*, (1996) 17(2):117-124	
	BF	Scott, Glynis, et al, "Fibronectin Suppresses Apoptosis in Normal Human Melanocytes Through an Integrin-Dependent Mechanism", *J. Invest. Dermatol.*, (1997) 108:147-153	
	BG	Yano, Yoshiko, et al, "Cyclic Strain Induces Reorganization of Integrin $\alpha_5\beta_1$ and $\alpha_2\beta_1$ in Human Vein Endothelial Cells", *Journal of Cellular Biochemistry*, (1997) 64(3):505-513	
	BH	Zhang, Zhuohua, et al. "The $\alpha 5\beta 1$ integrin supports survival of cells on fibronectin and up-regulates Bcl-2 expression", *Proc. Natl. Acad. Sci USA*, (1995) 92:6161-6165	
	BI		
	BJ		
	BK		
	BL		
	BM		

Examiner Signature		Date Considered	8/21/06

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete If Known	
Application Number	10/685,665
Filing Date	October 14, 2003
First Named Inventor	Varner, Judith A.
Art Unit	1645
Examiner Name	S. Ungar
Attorney Docket Number	021935-000130US

U.S. PATENT DOCUMENTS+

Examiner Initials*	Cite No.[1]	Document Number: Number Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
PR	AA	US-5,877,181	10/14/1997	Parish	
PR	AB	US-5,874,081	02/23/1999	Parish	
PR	AC	US-6,123,941	09/26/2000	Bissell	
	AD	US-			
	AE	US-			
	AF	US-			
	AG	US-			
	AH	US-			
	AI	US-			
	AJ	US-			
	AK	US-			
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	AQ	US-			
	AR	US-			
	AS	US-			
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FOREIGN PATENT DOCUMENTS

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	AU							☐
	AV							☐
	AW							☐
	AX							☐
	AY							☐
	AZ							☐
	BA							☐
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				Filing Date	October 14, 2003
				First Named Inventor	Varner, Judith A.
				Art Unit	1645
(use as many sheets as necessary)				Examiner Name	
Sheet	2	of	2	Attorney Docket Number	021935-000130US

NON PATENT LITERATURE DOCUMENTS			
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PR	BC	CONFORTI, et al. "Human Endothelial Cells Express Integrin Receptors on the Luminal Aspect of their Membrane", *Blood* (1992) 80(2):437-446	
	BD		
	BE		
	BF		
	BG		
	BH		
	BI		
	BJ		
	BK		
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